

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION**

LIFE TECHNOLOGIES CORPORATION,
and APPLIED BIOSYSTEMS, LLC,

Plaintiffs

V.

BIOSEARCH TECHNOLOGIES, INC.,
BIO-SYNTHESIS, INC., and EUROFINS
MWG OPERON INC.,

Defendants.

CIVIL ACTION NO. 2:09-cv-00283-DF

**DEFENDANTS BIOSEARCH TECHNOLOGIES, INC. AND EUROFINS MWG
OPERON INC.'S REPLY IN SUPPORT OF THEIR MOTION TO RECONSIDER THE
MAGISTRATE'S CLAIM CONSTRUCTION ORDER**

I. INTRODUCTION

Plaintiffs Life Technologies Corp. (“Life Tech”) and Applied Biosystems, LLC (collectively, “Plaintiffs”) have submitted a carefully crafted opposition that uses clever legal twists to attack the straightforward arguments put forth by Defendants Biosearch Technologies, Inc., and Eurofins MWG Operon Inc. (collectively, “Defendants.”) Defendants respectfully request that this Court disregard Plaintiffs’ arguments and reconsider its construction of “monitoring,” “hairpin,” and “quencher” in accordance with the arguments from Defendants’ Motion to Reconsider Magistrate’s Opinion and Order. (Dkt. No. 218).

II. ARGUMENT

A. “Monitoring”

The basis for the Court’s interpretation of the claim term “monitoring the fluorescence” lies upon an inaccurate reading of the inventor’s own reference as shown below. Additionally, Plaintiffs distinguish Defendants’ case law by contorting the law to divert the Court’s attention from the well-established rule of construction that terms are interpreted in accordance with their ordinary and customary meanings as of the time of the invention. In fact, Plaintiffs’ position in this regard is in direct contrast to their earlier position during an interference to issue the claims of U.S. Patent No. 5,538,848 (the “’848 Patent”). Thus, Plaintiffs have failed to refute why the Court should not adopt Defendants’ construction of “monitoring.”

The Court misinterpreted “RT-PCR,” and as a result, reached the wrong conclusion. It rejected Defendants’ construction and found that Defendants’ extrinsic evidence showed Dr. Livak considered real time PCR monitoring to be within the scope of his invention. This decision was based upon the following quote from Dr. Livak’s article: “[r]esearchers have developed several methods of quantitative PCR and RT-PCR.” Memorandum Opinion and

Order (Dkt. No. 212) at 17 (“Order”) (internal citation omitted). The Court, however, was in fact incorrect, and took the quote out of context due to misunderstanding “RT-PCR” to mean **real-time** PCR when in fact RT-PCR means **reverse transcriptase** PCR, a completely different concept. *See* Heid et. al., *Genome Research*, 6:989-994 (1996) at 986 (Ex. C to Defendant’s Claim Construction Brief) (Dkt. No. 192-3) (“PCR and **reverse transcriptase** (RT)-PCR have permitted the analysis of minimal starting quantities of nucleic acid (as little as one cell equivalent).”) (emphasis added). In rejecting Defendants’ construction of “monitoring,” the Court found that Defendants’ extrinsic evidence showed Dr. Livak considered real-time PCR monitoring to be within the scope of his invention. This misunderstanding contributed to, if not actually formed the basis of, the Court’s belief that Dr. Livak’s article described “different methods that measure product during PCR reactions” as part of the prior art, when in fact the article described different methods of reverse transcriptase PCR. Order at 17. Because the Court incorrectly relied upon this finding in its decision to include real-time in its construction of monitoring, its misunderstanding is core to its incorrect claim construction.

Furthermore, Plaintiffs attempt to distinguish Defendants’ cited case law for a lack of “time dependence” in the claims or specification. Plaintiffs state that “[n]o such temporal dimension or ‘implicit time-dependence’ exists here.” Opposition to Motion to Reconsider Claim Construction Order at 12 (Dkt. No. 221) (“Opposition.”)

However, this statement is in direct contrast to arguments made by Plaintiffs during interference proceedings to issue the ’848 Patent. In fact, Plaintiffs admitted during prosecution that monitoring must be done “when the probe is hybridized to the target.” Johnson Declaration in Support of Reply in Support of Motion to Reconsider Magistrate’s Claim Construction Order, Ex. 1 (Life Tech. Declaration in Support of Interference at 11) (“All of the Livak claims of the

'848 Patent are directed to a method of . . . monitoring the occurrence of amplification of the target polynucleotide by fluorescence from a reporter molecule on the probe when the probe is hybridized to the target polynucleotide.”). As is shown from Plaintiffs’ own admission in the record, this monitoring can only happen when the temperature is low, such that the probe is hybridized to the target; at the higher temperatures used during PCR to create single stranded nucleic acid, the “monitoring” cannot occur.

Even assuming *arguendo* that no such “implicit time-dependence” language exists here, Plaintiffs’ argument still fails. The Court certainly did not mention a requirement for “implicit time-dependence” language when it cited *PC Connector*; it simply applied the rule that the ordinary and customary meaning of a term is taken as of the time of invention. Order at 24. In fact, when the Federal Circuit cited *PC Connector* for a “time-dependence” rule, it did so because a patent had that same language in the written description. *Muniauction, Inc. v. Thompson Corp.*, 532 F.3d 1318, 1326 (Fed. Cir. 2008) (“The use of ‘conventional’ to modify ‘Internet browser’ and ‘web browsing software’ denotes a reference to web browsers in existence at the time of the alleged invention of the ’099 patent.”). Plaintiffs’ attempt to distinguish Defendants’ case law fails because the converse is not necessarily true. Just because a patent’s claims or specification does not include language such as “normally” or “conventional” does not mean that the well-established rule that claims are interpreted as of the time of the invention should not apply. *PC Connector* still stands for the simple rule that a claim’s “meaning must be interpreted as of its effective filing date.” *PC Connector Solutions LLC v. Smart Disk Corp.*, 406 F.3d 1359, 1363 (Fed. Cir. 2005).

B. “Hairpin”

Plaintiffs again improperly discount intrinsic evidence other than the specification. They wrongly assert that the Court may simply ignore the prosecution history. The prosecution history states:

[t]he Specification thus clearly defines what is intended by the term “hairpin structure.” This definition for the term “hairpin structure” is consistent with other art references which employ the term “hairpin structure.” See U.S. Patent No. 5,607,834 [Exhibit 1] (“**a hairpin consists of a base paired double-helical region, the stem, with a loop of unpaired bases at one end.**”)

‘591 Prosecution History, Aug. 6, 1997 Response (Ex. G to Plaintiffs’ Claim Construction Brief at 2-3) (Dkt. No. 181-6) (emphasis added). Plaintiffs themselves do not recite a requirement that a “hairpin structure” contains a reporter and a quencher in proximity. The Court cannot, as Plaintiffs advocate, simply ignore the prosecution history’s clear disavowal in favor of the specification. Instead, the Court was required to consider Plaintiffs’ disavowal of the scope of “hairpin.”

C. “Quencher”

Plaintiffs have introduced a new twist to their original arguments regarding “quencher.” Previously, Plaintiffs admitted that an interpretation of “quencher molecule” that allows non-fluorescent quenchers renders some of the claims invalid. At the Markman hearing, Plaintiffs stated that:

[t]he patentees knew how to use the words they wanted to use, they used the words they wanted to do, and ultimately, if the Court disagrees, perhaps some of the claims are invalid, but given how clear the intrinsic record is, the Court should not try to save the patentees from themselves and try to, in order to preserve the validity of certain claims, ignore what the entire intrinsic record has said about quencher molecule[s].

Aug. 23, 2011 Claim Construction Hearing Tr. at 57:25-23 (Ex. 1 to Opposition) (Dkt. No.221-1). Having admitted this, Plaintiffs should be supporting an interpretation that does not lead to such a conclusion, as directed by the Federal Circuit. *See Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 911 (Fed. Cir. 2004) (“[C]laims should be so construed, if possible, as to sustain their validity.”).

Now, however, Plaintiffs have changed their position, and rather argue, “[t]he claims require [that the quencher molecule emit light], not through a construction of the word ‘quencher,’ but rather through a different claim limitation” and that “claim 24 of the ‘848 Patent includes a limitation reciting ‘the ratio of the fluorescence intensities of said reporter molecule to said quencher molecule.’” Opposition at 4.

Essentially, Plaintiffs are now seeking to change their previous position that in fact some claims would be rendered invalid by an interpretation including non-fluorescent quenchers. This admission actually supports Defendants’ position as stated by the Federal Circuit. Plaintiffs have thus crafted a new argument involving the effect of construing the term “quencher” differently for different claims. *See* Opposition at 4. In fact, this is not just a new argument; it is a direct contradiction to Plaintiffs’ previous argument. Previously, Plaintiffs conceded that if a construction left some claims nonsensical, those claims would be invalid; now, Plaintiffs use mental gymnastics to contort the facts so that “quencher” may indeed have different interpretations in different claims.

III. CONCLUSION

This Court should avoid Plaintiffs’ detours of distraction in evaluating Defendants’ simple arguments. Defendants respectfully request that the Court reconsider its constructions of “monitoring,” “hairpin,” and “quencher.”

Dated: November 3, 2011

Respectfully submitted,

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CERTIFICATE OF SERVICE

I certify that a true and correct copy of the foregoing document has been served on all counsel of record via the Court's Case Management/Electronic Case Filing and/or electronic mail on November 3, 2011.

/s/ Daniel Johnson, Jr.
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